Forest Policy Reform and the Restructuring of the Forest Industry in Russia

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The Russian forest is the last big wood basket of the international timber market and the conservation of the Russian forest is critical to protect global environment. There is a strong need to analyze present situation of forest policy and forest industry in Russia. The basic direction of forest policy reform of Russia is decentralization and introduction of market principles. However, the lack of specialists in forest policy in the regions and the conflict between central and regional governments has accelerated the confusion of forest policy. Forest management organizations cannot spare enough money for forest management because of the financial crisis of Russian government. Forest industry has also deteriorated. Although privatization of the forest industry was completed, it did not improve the management of enterprises and they could not survive the economic crisis. Output of the forest industry has decreased and most enterprises came close to bankruptcy. Under these circumstances, the former regional amalgamation of forest industry, which has accumulated hard currency earned by timber export, re-took control of the industry and tried to increase timber exports even more. However, logging enterprises, facing economic crises, cannot observe forest regulations and forest management organization cannot control these violations. A recovery of forest industry may accelerate the degradation of forest resources in Russia.

Key words: forest industry, forest policy reform, privatization, Russia

After the collapse of the USSR, the Russian government has been trying to rapidly convert their system into a capitalistic one. Forestry and forest industry policy are no exceptions. The Russian government introduced a new forest policy related to the market economy and decentralization, and the promotion of the privatization of the forest industry. However, with the failure of their radical economic reform and confusion in the economic system, the production of forest products has decreased dramatically with many forest industry enterprises now facing serious financial crises. The Russian forest is the last big wood basket of the international timber market, and the conservation of the Russian forest is critical to protect the global environment. In this paper, we will describe the current state of policy reform in the forestry and forest industry in Russia and its effect on the conservation of Russian forests. Our study will focus on the Khabarovsk region (Fig. 1) which is one of the forerunners of forest policy reform and is a major timber supplier to Japan.

Current State of Forest Policy and Forest Management 1 Policy reform in the Russian Federation

The fundamental direction of the reform of forest policy was set by the "Forest Basic Law of the Russian Federation" (FBL) in 1993. The following are its basic directions.

Firstly, FBL provides a policy to decentralize the administration system of forests. The former USSR had a highly centralized forest policy system (Table 1). Central planning and forest management organizations had exclusive power to command the direction of forest management and distribution of forest use. However, the command economy system collapsed, and the regions have become powerful and have tried to create autonomies. Under these circumstances, FBL introduced a decentralized system of forest administration and a

management system in Russia. Table 2 shows the authority of each organization. The central government sets the framework of forest policy, and regional governments produce the concrete forest policy by considering their regional characteristics and decide the method to issue forest licenses, and the municipalities distribute them to forest users.

Secondly, FBL introduced market principles to forest management. Under the central planning system, forest management organizations (*leskhozi*) distributed timber concessions to logging enterprises (*lespromkhozi*) according to the instructions of the planning organization (Fujiwara *et al.*, 1992). FBL clearly introduced a competition system such as tenders and auctions for timber concessions.

Thirdly, FBL improved measures to conserve forest resources by prohibiting forest management organizations from engaging in final cutting and forced them to concentrate on forest management. It also provides special funds to regenerate and protect forests by collecting 5% of the income of logging enterprises from the sale of timber.

Although FBL has a number of epoch-making provisions, it also contains problems. Firstly, decentralization creates conflicts between central and local governments. By conforming to the current trends in decentralization, local government tries to be independent from central government, while central government fears a loss of its power. As a result, the relationship between central and local governments has become tense. Another problem of decentralization is the lack of specialists of forest policy in local governments. Under the central planning system, most political decisions concerning forest policy were made in Moscow and local people had very few opportunities to participate in the formation of forest policy. This has accelerated the confusion in forest policy and has had a negative effect on forest conservation. The last and most fundamental problem is the lack of provision of ownership of forest resources under the FBL. Although the

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Fig. 1 Location of study.

Table 1 Distribution of Authority of each organization by former FBL and Forest Law of Russian republic.

Organization	Authority					
USSR	(1) Institute basic regulations for forest management, (2) Decide cutting volume and process of timber distribution, (3) Formulate program for development of forestry and forest management, (4) Establish national forest management organization and its regulations, (5) Classify forest fund into groups.					
National Forest Management Organization	(1) Control state, use, regeneration and protection of forest.					
Russian Republic	Same as USSR (1) to (4), but under direction of USSR.					
Regional Soviet	(1) Participate in formulation of programs,(2) Support forest protection and fire prevention activities.					
Municipality	(1) Participate in control of forest management under direction of higher organizations.					

federal government of Russia keeps the ownership of forest land under Presidential ordinance, there are strong claims to create private and regional ownership of forest resources (Petrov, 1993). Without a clear definition of the ownership of the forests, it is impossible to establish and carry out a stable forest policy and forest management. The FBL is now under review for amendment, and a new FBL will provide a clear definition of forest ownership.

2 Policy reform in the Khabarovsk region

Khabarovsk regional government has engaged in forest policy reform since 1991 and regulations for concessions and establishing special funds for forest conservation were established in June, 1992 (Khabarovsk regional government, 1992). Although these regulations have not become effective

Table 2 Distribution of Authority of each Organization by FBL.

Organization	Authority					
Russian Federation	1 (1) Institute Federal forest law, (2) Form fram work of forest policy, (3) Establish national for management organization, (4) Establish and mage special fund for forest regeneration and establishment, (5) Establish standards to iss forest license.					
National Forest Management Organization	(1) Manage forest and control forest use, (2) Control forest user, (3) Hold forest land.					
Regional government	(1) Institute regional forest law, (2) Formulate regional forestry development program, (3) Distribute forest fund to municipalities.					
Municipality	(1) Control forest management activities, (2) Distribute forest licenses to forest industry.					

because of the political confusion, they set the fundamental direction of forest policy in the Khabarovsk region. Regional government established a division of natural resources in 1992 as a center for natural resource policy, including forest policy, and this division began to form forest policy in accordance with federal forest policy.

The basic direction of forest policy was established by 1994 and can be summarized by the following points. First, local government was made responsible for the management of commercial forests. Secondly, the necessity to set up a committee for the distribution of timber licenses under local government, composed of representatives from local government, local parliament, local environmental committees, the regional forest office and the Institute of Forestry was established. This committee was to examine applications from forest industry enterprises and distribute licenses. However, as the priority of the former national logging enterprises

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(lespromkhozi) over other enterprises remains, the structure of forest use has not changed fundamentally. Finally, forest policy required that 50% of stumpage sale income paid to the municipal budget should be distributed to forest management organizations. This system was introduced to strengthen the financial position of forest management, but, because of the financial crises of both logging enterprises and municipalities, it has not worked well. Regional government had become dominant in forest policy in Khabarovsk, but the traditional structure of forest use has changed little and the financial background of forest management has been kept low.

Forest management in the Far East has not been very intensive (Chorishev and Sheingauz, 1988). More than half the expenditure for forest management in the Far East in the early 1980s was for fire detection, prevention and fighting (Table 3). Though fire control is a critical problem for the management of Russian Far East forests and expenditure has been concentrated in this area, the average burnt forest area was officially reported to be over 300,000 ha a year. However, this figure is considered to be an underestimate, as the actual forest area burnt was seven times the figure in the official report. Deforested land caused by forest fires comprises 6% of all forest land (Sheingauz *et al.*, 1989). Large-scale clear

cutting and illegal cutting has continued to degrade forest resources (Nilsson et al., 1994). However, because of the limitation of the budget, forest management organizations can not spare enough money for forest regeneration. To make matters worse, allocations of forest management funds to local forest management organizations from central government have been reduced recently and the introduction of measures to strengthen the finances of forest management has failed at the moment. Because nonpayment and delay of payment to foresters has become common, their motivation for working has declined, and it has become difficult for leskhozi to conduct a minimum forest management activity. To make matters worse, logging enterprises, facing economic crises, are not observing the regulations, and forest management organizations cannot control these violations.

As a result, the forest resources of the Far East have been degraded. We will examine the degradation of forest resources from 1988 to 1993 in the Khabarovsk region. Although the area of forest has been stable in this period (Table 4), the age structure of forests has deteriorated. As shown in Table 5, the area of mature and overmature forest decreased 6 % whereas almost mature forest increased. This means that large scale felling of old growth forest has continued in the region. The growing stock has also decreased. Table 6 shows that the total

Table 3 Expenditure for forest management in the Russian Far East (1983-85).

(unit: million rubles, (%))

Region	Sakha	Priorskii	Khabarovsk	Amur	Kamchatka	Magadan	Sakhalin	Total
Contract work								
Forest management	5.5	1.3	6.2	5.0	0.7	3.3	1.1	23.1
	(9.6)	(4.1)	(8.6)	(19.5)	(6.3)	(16.9)	(3.3)	(9.2)
Fire control (aerial)	32.9	4.8	22.6	8.4	1.4	7.5	3.0	80.6
, ,	(57.3)	(15.0)	(31.5)	(32.7)	(12.6)	(38.5)	(9.0)	(32.1)
Others	0.1	0.1	0.2	0.1	` - ′	0.1	0.2	0.8
	(0.2)	(0.3)	(0.3)	(0.4)	_	(0.5)	(0.6)	(0.3)
Direct management work by forest	managemei	nt organization	1			, ,	, ,	• •
Forestry	2.5	11.6	15.0	3.6	2.8	1.9	12.2	49.6
•	(4.4)	(36.4)	(20.9)	(14.0)	(25.3)	(9.7)	(36.4)	(19.8)
Intermediate cutting (including)	1.2	4.4	7.2	1.8	1.0	1.8	6.7	24.1
Regeneration	0.6	10.2	12.3	2.9	2.1	1.4	9.0	38.5
-	(1.0)	(32.0)	(17.1)	(11.3)	(18.9)	(7.2)	(26.9)	(15.3)
Fire prevention	8.1	3.7	12.1	5.0	1.3	3.4	2.7	36.3
•	(14.1)	(11.6)	(16.9)	(19.4)	(11.7)	(17.4)	(8.0)	(14.5)
Fire fighting	3.7	· - ·	3.0	0.6	0.8	· — ·	1.3	9.4
	(6.4)	_	(4.2)	(2.3)	(7.2)	_	(3.9)	(3.8)
Forest protection	0.0		0.1		- '		0.1	0.2
	(0.0)		(0.1)		_		(0.3)	(0.1)
Others	4.0	0.2	0.3	0.1	2.0	1.9	3.9	12.4
	(7.0)	(0.5)	(0.4)	(0.4)	(18.0)	(9.8)	(11.6)	(4.9)
Total	57.4	31.9	71.8	25.7	11.1	19.5	33.5	250.9
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

Source: Chorishev, B.A. and Sheingauz (1988).

Table 4 Forests in Khabarovsk region by categories of land.

(unit: thousand ha)

		Non-forest land	Total						
	Stocked fo								
	Artificial forest	Subtotal	Open forest	Logged over	Burnt	Cutover land	Subtotal		
1988	106	48837	2451	2551	4571	811	10952	17274	77063
1993	108	48872	4675		4234	697	10445	16793	76110

Source: Forest Service of Russia.

Table 5 Forests in Khabarovsk region by age category.

(unit: thousand ha, %)

	Total	Young forests	Middle-aged forests	Almost mature forest	Mature forest	Overmature forest		
1988	48837	7813	12817	4612	15259	8336		
	(100.0)	(16.0)	(26.2)	(9.4)	(31.2)	(17.1)		
1993	48872	8479	13209	4947	14518	7719		
	(100.0)	(17.3)	(27.0)	(10.1)	(29.7)	(15.8)		

Source: Forest Service of Russia. Note: Each age category includes specific age classes as follows; young forest-first 2 age classes, almost mature-1 age class just before the age of maturity, mature - first 2 age classes after the age of maturity, over mature-all age classes older than mature forest, middle-aged-age classes between young and almost mature forest. Length of age class depends on age of maturity of each species. For species that have maturity of 50-70 years, one age class is 10 years. For species 80-140 years old, one age class is 20 years, species with age of maturity over 160 years, one age class is 40 years. For example, the length of age class for spruce, 80 years to the age of maturity, is 20 years and consequently is categorized as follows; young 0-40, middle-aged 41-60, almost mature 61-80, mature 81-120, overmature 121 + years.

Table 6 Growing stock by species in Khabarovsk region.

(unit: million cubic meters, %)

	Coniferous					Toler	ant decid	luous	Intolerant deciduous			Shrub	Total	
	Pine	Spruce	Fir	Larch	Cedar	Total	Beech	Oak	Total	Birch	Aspen	Total		
1988	173.6	1492.5	83.5	2701.3	130.9	4581.8	14.0	59.0	226.4	214.0	35.6	328.0	187.8	5324.0
	(3.3)	(28.0)	(1.6)	(50.7)	(2.5)	(86.1)	(0.3)	(1.1)	(4.3)	(4.0)	(0.6)	(6.2)	(3.5)	(100.0)
1993	154.6	1369.1	85.8	2619,4	116.6	4441.1	12.8	58.5	181.6	224.2	36.0	398.6	231.3	5167.0
	(3.0)	(27.7)	(1.7)	(50.7)	(2.3)	(84.3)	(0.2)	(1.1)	(3.5)	(4.3)	(0.7)	(7.7)	(4.5)	(100.0)

Source: Forest Service of Russia.

growing stock of the region decreased 4 % and the ratio of coniferous and tolerant deciduous species to intolerant deciduous species fell. The reason for species change is that coniferous and tolerant deciduous species with high economic value have been clear-cut and these areas are changing to intolerant deciduous forests. Frequent occurrence of forest fires accelerates species change. Without significant silvicultural treatment the change to less desirable species will increase (Nilsson *et al.*, 1994).

Trends in the Forest Industry

1 Production

Figure 2 shows the changes in output of major forest products in Russia since 1988. With the failure of economic reform under "perestroika," economic confusion has emerged since the late 1980s and output has decreased. These trends have accelerated since 1992 and output fell dramatically in 1993 (Shlykov, 1994). Production of logs and lumber in 1993 was half of the level in 1988. The main reason for the rapid decrease in production since 1992 is the skyrocketing inflation caused by the removal of price controls. Rapid inflation caused a decrease in consumer purchasing power. Another reason is the collapse of the USSR. Before the collapse, the Russian Republic exported a large amount of forest products to the central Asian republics of the USSR where forest resources are scarce. However, the collapse of the USSR and the rapid inflation of transportation costs has made it difficult to export forest products to the former Soviet republics.

The decrease in output of forest products was more drastic in the Far East (Fig. 2). Because the priority of investment in the Far East forest industry has been low and infrastructures and production facilities were not well structured, economic confusion easily damaged the forest industry in this region. Moreover, the economic depression in the Far East has been

more severe than in European Russia, and the forest industry in the Far East was more highly dependent on exports to former Soviet republics (Kakizawa, 1994). As a result, the decrease in output in forest products in the Far East has been quite drastic.

The Russian government has projected that the production of the forest industry will increase from 1995 and will reach the level of 1990 in 2005 (Shlykov and Ryzhenkov, 1994). This shows that even the Russian government admits that it would take a long time for production to recover. But this estimate seems to be optimistic, because the production of forest products in the first quarter of 1995 did not reach the level of 1994.

2 Privatization and restructuring of the forest industry

The basic direction of economic reform in Russia is the transition from a central planning to a market system and privatization of state enterprises. Under the central planning system of the USSR, forest industry enterprises were owned by the state government and these enterprises were directed and organized by the Ministry of Forest Industry through regional amalgamations of the forest industry (Blandon, 1983). With economic reform, The Ministry of Forest Industry was abolished in 1992 and a state-owned enterprise "Russian Forest Industry (Roslesprom)," was established as the central organization of the forest industry. But, because it had insufficient financial backing and the regions wanted to be independent from Moscow, its function as a pressure group on the government is limited. The regional amalgamations of the forest industry remained in most regions, but their function has become limited as enterprises were privatized and tried to become independent from higher organizations. We will now examine this process in Khabarovsk Region.

Based on the "Program for Privatization of Russia," the privatization of forest industry enterprises in the Khabarovsk

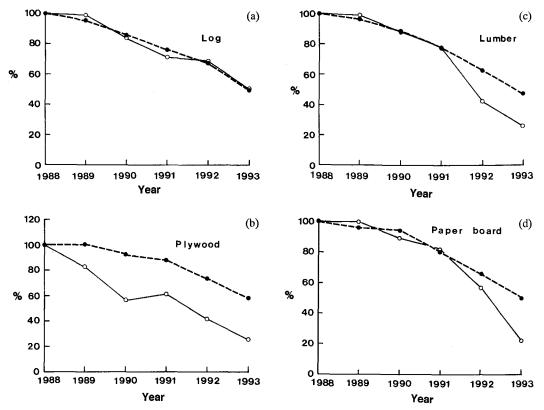


Fig. 2 Forest products output as a percentage of the 1988 figure. Legend: ●, Russia; ○, Khabarovsk. Source: Lesnoy ekonomicheskii vestnik No.1 (1994), Minakir ed. (1993), HIRS (1995).

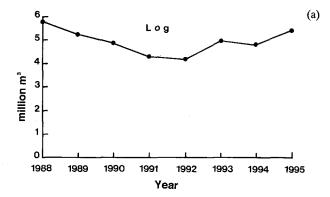
began in 1993. The process of privatization by the forest industry in the Khabarovsk Region was the so-called "variant 2." This type of privatization distributes 51% of stock to employees of enterprises, 29% to the open market and 20% to the government (Mizohata, 1993). This process of privatization of the forest industry was completed by the middle of 1994. In this process, enterprises tried to be independent from the regional amalgamation of the forest industry, Darilesprom, which began to lose its dominant position in the region. However, privatization did not improve the management of the enterprises. Lacking management skills and experienced managers, most enterprises changed neither the make-up of the management nor the management methods. Privatization meant just "transfer of ownership of stock." As a result, these enterprises could not survive the economic crises and one after another they came close to bankruptcy. At this point, the enterprises asked for support from Darilesprom, which began to gain control over the forest industry in the Khabarovsk region again. Privatization did not improve the economic conditions of the forest industry but accelerated the crises in the industry, and the former middle planning organization began to regain control of the regional industry.

Roslesprom also recognized that the main reason for the critical situation in the forest industry was the absence of organizations giving proper instructions to enterprises. Roslesprom is now pushing for a strategy to establish a regional stockholding company-financing complex. According to this concept, a regional stock holding company gathers the stock

of forest industry enterprises and controls these enterprises with the aid of banks which specialize in the forest industry (Kondratiuk, 1994). In the Khabarovsk region, *Darilesprom* has already begun to buy the stock of enterprises as a stockholding company, and now controls some of these enterprises. *Darilesprom* also established a forest industrial bank in late 1994 and is shaping a solid industrial complex.

Another aspect which influences the forest industry in Russia is the export of timber. Timber exports, once monopolized by the state company, have been liberalized and many small companies have begun to enter this business. However, the main winners in this field are regional amalgamations of the forest industry. For example, in 1991 *Darilesprom* established a timber exporting company with other regional amalgamations of forest industry in the Far East and East Siberia, named *Dariles*, and half of Japan's imports of Russian timber now come from *Dariles*. Because the ruble is in turmoil and is not accepted as an international currency, hard currency which can be acquired from timber exports is valuable. By developing timber exports, *Darilesprom* has accumulated hard currency and has established a firm economic position in the region.

Figure 3 shows the trend of timber exports to Japan. Log exports to Japan had decreased in line with production, but it has increased in spite of a decrease in production in 1993. As mentioned previously, the Far East has lost market share in the Asian republics of the former USSR. On the other hand, the forest industry is eager to earn hard currency and has re-



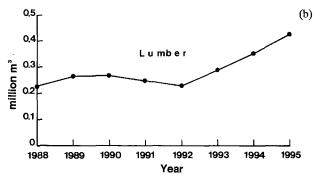


Fig. 3 Trend in Russian timber exports to Japan. Source: Forestry Agency.

established the timber exporting organization. These factors have made it possible for Russia to increase log exports to Japan. Although most of the timber exported to Japan has been in the form of logs, lumber exports have increased recently. This increase can be attributed to joint venture sawmills. Since 1988, Japanese trading houses and regional amalgamations of the forest industry in Russia have begun to establish joint venture sawmills in the Far East and Eastern Siberia. In 1995, nine joint venture sawmills were in operation with an annual production capacity of over 300 thousand cubic meters. Most of this lumber production was shipped to Japan, contributing to the increase in lumber exports.

The introduction of market economy reforms and an open investment policy has resulted in an increase in timber export to Japan. Though economic uncertainty will continue for several years, the forest industry of Russia will continue to try to increase timber exports to Japan to obtain hard currency and strengthen the economic position of the forest industry in the region.

Conclusion

Russian forest policy and forest industry is now in a transition period from a central planning system to a market system. Although forest policy has been decentralized and market principles have been introduced into forest management, the process of policy reform is just beginning, but many problems and conflicts remain. Local government has begun to develop an independent forest policy from Moscow, but its ability to carry out the policy is limited. The allotment of funds to forest management has been severely limited because

of the financial crisis of the Russian government. Under these circumstances, forest policy is unstable and the government cannot control the use of forests well, with the result that violations of forest practice regulations by logging enterprises have increased rapidly.

The output of the forest industry has decreased and most of the forest industry enterprises are in a critical situation. Although the privatization of state enterprises has developed, these enterprises do not have the ability to overcome economic crises. Under these circumstances, regional amalgamations of forest industry have recovered in the regions, supported by hard currency earned by timber exports. The forest industry is the main export industry in most of Siberia and the Far East regions, and the regional government depends on the forest industry for financial support. Although regional government is concerned with conservation of natural resources, the financial crisis of regional government means that it cannot control illegal cutting and poor forest practice of the forest industry. In fact, a new licensing system cannot stop violations of forest practice regulations by logging enterprises, thus indicating that a recovery of the forest industry may accelerate the deterioration of forest resources in Russia.

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